

501 like this, then you cut the inside, then you get another stone and work
713 it inside so that it is smooth.'

539 Then he went back to his home and fetched a spear and a bow and
arrows. Then he went alone to the bush. He was sorry about his trees.
He said: 'Oh, why should they all know about my trees?' He took an
arrow and shot it into the tree; that is why the *t/iniv* tree has many holes
in it, so that people have to stop them with putty nut. The man wanted
them all to have hard work to stop them with putty. The arrow stuck
in the tree, presently it fell down; since then all the *t/iniv* trees have
holes in them, and now the people have to put putty into them.

- 396 *Materials.* Several different varieties of tree may be used. The
824 one universally preferred, on account of the straightness and suit-
able size of its trunk, and the softness of its wood, making for ease
in working, is that mentioned in the legend, called, in the Petats
dialect, *uertsil*, and in that of Kurtatchi *t/iniv*; in the latter case the
same word is used for the finished canoe, which at Petats is called

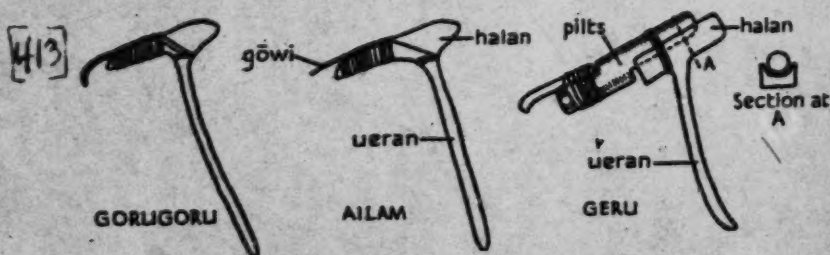


FIG. 16. Tools used in making a dug-out canoe.

djini. The tree is tall and slender, with rather smooth bark, which strips off in large slabs. There is a milky sap under the bark when it is first stripped, and the same milky fluid exudes from the stems of the leaves when they are broken off. The wood is white and so soft that one man can fell a *t/iniv* tree by himself, unless it is a very large one.

413 *Tools used.* (The native terms are in the Petats dialect.) In the
177 olden days, stone implements were used. Fire has never been
439 employed to hollow out the log. Nowadays the work is done with
metal tools obtained from traders, rehafted in the native fashion,
probably much as the stone implements were hafted of old (Fig. 16).
They use, besides the ordinary trade axe, which they call a toma-
hawk, a straight-bladed adze (*ailam*) and an adze with a curved

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blade (*gorugoru*). Both are hafted on to handles of which the *halan*, i.e. the part supporting the blade (*gōwa*), is in one piece with the part held in the hand (*ueran*). This latter is long, fairly thin, and rather roughly straightened. The blade is bound to the handle with strips of the tough outside rind of the creeper *Lygodium dichotomum* (*aisam* in the Petats dialect, the same as *asam* in the Kurtatchi dialect). The second form of adze has a curved blade, hafted in the same manner. There is another tool (*geru*) consisting of a curved blade fixed on to a piece of wood (*pilts*), which revolves in a groove cut in the handle, so that the blade can be turned round. The straight part of the canoe is trimmed roughly with the axe; the shaping of the ends, the keel, and most of the inside work is done with one or other of the adzes, and the corners and curved pieces with the *geru*.

Method of Construction. Dug-out canoes are very numerous on the island of Petats, the position of which is favourable to their use. At one time during my three months' residence six were in process of manufacture simultaneously. At Kurtatchi they are less in evidence, the coast being much rougher, and are generally kept at the fishing hamlet of Tarongen, on the other side of the peninsula, in the shelter of the bay. Two were made by the Kurtatchi people while I was there. The method is the same in both places, but as I watched most carefully the process of manufacture at Petats, my description hails from that island. A job of this sort is usually carried out rather spasmodically, and the time required varies a good deal. Possibly more than the usual amount of concentration was put into the work done on this canoe, at least during the initial stages, because its maker was anxious to show me what he could do. I have known a half-finished canoe to be left untouched for weeks at a time because the craftsman did not feel inclined to work on it. But with this proviso, the time is more or less representative.

October 28. Tree felled. The one selected as suitable had a trunk of 2 feet in circumference about 4 feet above the ground, where it was felled, and continued the same size for a considerable part of its height. The upper portion of the trunk was cut away, leaving a piece which they said measured $4\frac{1}{2}$ *gā* (*gā* = a fathom or span, roughly about 6 feet) to be converted into the canoe. My measurement made it a little over 25 feet.

October 29. The bark was stripped off, except for a piece on the keel. The outside was trimmed roughly to shape; the portion

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[827]

396

[461]

[804]

- 396 which was to be the top of the canoe was cut flat. The log was chipped away to a width of about 10 inches in the middle, tapering to about 2 inches at each end, resting on its flattened sides during this operation.

October 30. More trimming was done on the outside; the canoe was then turned over and the inside cut out roughly for the greater part of its length. So far, one man worked on it alone.

- [887] October 31. The canoe-builder's father, an old man of great skill, came to help him. The canoe was turned over again, the bark which remained was cleaned off, and the keel and both ends trimmed with some care. The knob at each end was roughly shaped.

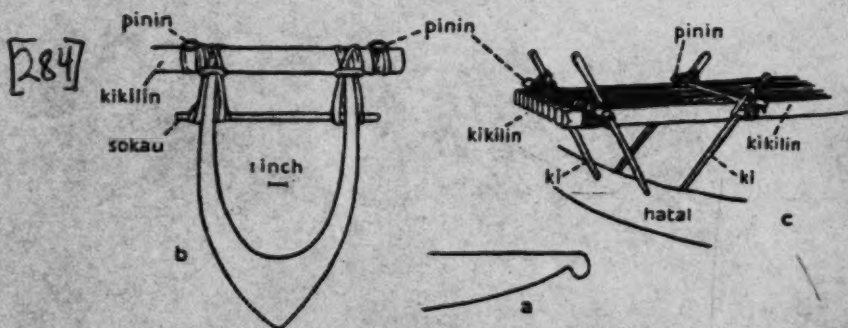


FIG. 17. (a) 'Nose' of dug-out canoe. (b) Vertical section of dug-out canoe. (c) Stick attachment of outrigger float.

This has the shape of a blunt hook (Fig. 17a), and is intended to provide a grip for the hand when the canoe is lifted. The inside was hollowed out very considerably (Pl. 48a).

November 1. The keel and both ends were finished, the adze being used for this purpose. More work was done on the outside, this with an axe. The inside was further shaped, using the tool called *geru*, which can be turned round.

November 2. More trimming carried on, both inside and out. The canoe now had one side shaped, the keel finished, and the bottom part of the inside trimmed. Crossed sticks were fixed inside, to prevent warping.

- [527] November 3. Nothing done, it being Sunday.

November 4. Outside trimmed further, with the canoe turned on its side. The adze with the straight edge was used, with short, rather quick strokes, held near the far end of the handle with both

1: Blackwood E-5 (1929-1930) 1935

ON6 Buka ON6
Kurtatchi

PLATE 48



396 •

a. MAKING A DUG-OUT CANOE



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b. FILLING IN THE HOLES

[facing p. 364]

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hands, the right hand nearer to the tool. The hands were held at about the level of the waist. The sides were trimmed almost straight, not curving outwards with the contour of the tree. The thickness of the sides was tested by feeling with the hands one inside and one outside. A layer was taken off the whole length of the side of the canoe in about twenty minutes. Most of the day was spent on this trimming. 396 ●

Up to now, the work had been carried on in the bush, just where the tree fell. This evening, however, the canoe-builder decided to bring it down to the beach. He dragged it single-handed for part of the way, and then left it for the night. [482]

November 5. The builder and another man carried the canoe to the beach and trimmed it, by turns, all the morning, improving its shape and smoothing its rims.

At this point he apparently became tired of the job; there were also several things going on in the village to distract his attention. Nothing more was done to the canoe until the evening of November 20, when he measured with a fish line the position for the holes for holding the cross-pieces to which the outrigger-booms are lashed. [804]

November 21. The holes were made with a modern brace and bit, the canoe lying on its side. Three holes are needed on each side. They must be exactly in the centre of the canoe, about 3 inches from the rim. [177
413]

November 22. Three sticks (*sokau*) were pushed through the three pairs of holes. The *sokau* pass right through the hull, and project about 2 inches on either side of it. Two outrigger-booms (*kikilin*), about 9 feet long, were laid athwart the hull and lashed to the outer *sokau* on each side, projecting a little beyond the hull on the starboard side, the greater part of their length being on the port side. The space between the booms was filled with tightly packed transverse poles (also called *kikilin*) of the same length as the booms. The centre pole was lashed to the centre *sokau*, forming a platform, about a foot wide, braced by cross-bars (*pinis*) running parallel with and just above the rim of the canoe on each side. The number of poles varies from six to ten according to the size of the canoe. In answer to my question, the canoe-builder said that the proper length for the booms was *gā sia pa lim*, a span and an arm (*alima*, shortened to *lim*, means either arm or hand). [804]
The length varies very little in the different-sized canoes (see

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- 396 measurements on p. 368). Lashings of *aisam* were put round each of the poles including the two outrigger-booms, and under and round the *sokau* and the *pinin* several times. The platform was thus securely attached to the hull.

November 23. Most of the day was spent in stopping up the holes made by insects in the wood. In the other canoes I saw made, this was done before the platform was placed in position (Pl. 48b). [324] For filling in the holes the resinous fruit of the 'putty nut' (*Parinari laurinum*) is used. When first cut open, this has a pinkish colour and is of the consistency of putty, but on exposure to the

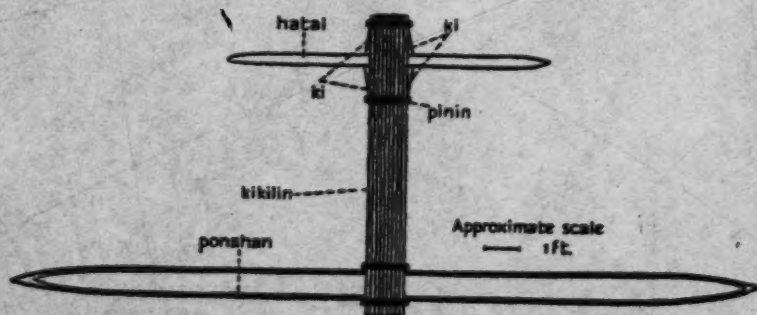


FIG. 18. Dug-out canoe viewed from above.

air it gradually hardens and turns black. It is then completely waterproof. When all the holes had been filled, the canoe was left for the filling to harden, until

December 7. The outrigger float was fixed. The float consists of a pole cut to a point at each end. The points are charred to harden them. Each boom is attached to the float by means of two connectives (*ki*) set obliquely in holes made in the upper surface of the float, two on each side, carrying the sticks up at an acute angle in two pairs, one of each pair on each side of the platform. The outside pair is fitted almost at the end of the platform, the inside pair about a foot to the right of it. A cross-bar (*pinin*) is lashed to the platform at the point where each connective meets it, and the connecting sticks are lashed to it.

The fixing of the outrigger float is the last essential operation. The canoe may then be launched. At the worker's pleasure the whole of the outside of the hull is coloured white by rubbing it with handfuls of a species of seaweed, wet with sea-water, just as

1: Blackwood E-5 (1929-1930) 1935

ON6 Buka ON6

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it is collected from the reef. This seaweed (*mō*) is a calcareous alga which Dr. Haddon tells me is used for the same purpose from Matty Islands to Santa Cruz. A zigzag pattern (*bīn*) may be painted in red along each side at the upper or lower margin, or both. 396
824
[171]
[532]

No ceremonies accompany the launching of a dug-out canoe.

TERMS USED IN CONNEXION WITH DUG-OUT CANOE¹

Meaning of Term.	Petats.	Kurtatchi.	
Dug-out canoe with outrigger	<i>dʒini</i>	<i>tʃinto</i>	501
Tree of which it is generally made	<i>uértail</i>	<i>tʃinto</i>	192
Keel	<i>haben</i>		197
Rim	<i>pánahan</i>		
Sides	<i>réhin</i>		
Generic term for either end (same word as for 'nose')			
Bow	<i>úsú</i>	<i>yígerus</i>	
Stern	<i>mélis</i>	<i>matdm</i>	
Hook on either end (same word as for 'hornbill')	<i>tao</i>	<i>hdpits</i>	
Slope of outline from keel to hook	<i>pógo</i>	<i>tʃitʃio</i>	
Outrigger booms and poles forming platform	<i>lámnt</i>		
Sticks (3) inside canoe, to which the outrigger booms are fastened	<i>kikilín (hikilil)</i>	<i>wonér</i>	
Cross-bars bracing platform	<i>sóhau</i>	<i>tapár</i>	
Stick attachment joining float to booms	<i>pínin</i>	<i>pínal</i>	
Binding fixing booms to canoe	<i>hi</i>	<i>hs</i>	
Creeper of which this is made (<i>Lygodium dichotomum</i> Sw.)	<i>pilpil</i>	<i>lau</i>	
Outrigger float	<i>alsam</i>	<i>alsam</i>	
	<i>hdal</i> or	<i>ag</i> or <i>waga</i>	
	<i>halas</i>		
Paddle	<i>hor</i>	<i>owes</i>	

Size. Three grades are distinguished by name, the actual measurements varying slightly within each class: *dʒini kekerik*, a small canoe suitable for two people but manageable by one paddler alone; *dʒini hahal*, medium size, can be paddled by two, but will take a passenger or a third paddler if required; *dʒini dʒin*, a large canoe for four or more people; these are unusual as they are rather clumsy to manage. 501

My own table of measurements was unfortunately lost, but the following, kindly taken by Mr. Gordon Thomas on the island of Pororan, may be regarded as typical of the whole area.

¹ Some of the Petats terms have been previously recorded by Friederici (1912, p. 295).

- 501 this form of craft is known, *mon*. Like the dug-out, it appears not to be indigenous. The first place in this region to make such canoes seems, if the native accounts are to be trusted, to have been the Lontis coast, on the north-west of Buka, since the Petats people and the inhabitants of the villages on the coast of Bougainville all say that they learnt the art of making them from the men of Lontis.
- 501 In certain portions of this latter area the natives still remain ignorant of it. The people of Tiop, an island just round the north-east corner of Bougainville, told me that they had no *mon* and did not know how to make them, and I was given to understand that the people farther down the east coast had none either, though I had no opportunity of verifying this statement personally. Friederici (1912, p. 303) saw them at Teperoi, near Numanuma, still farther down the east coast. At the other corner of the north coast of Bougainville the people of the Saposa islands certainly do not make them, and they account for their ignorance by saying that Morena, who taught them all their crafts (see p. 39), did not teach them
- [438] how to make *mon*, saying that when they wanted any they could buy them from Lontis or Hanahan, and must pay for them with spears and ceremonial currency. The people of Kurtatchi and the
- [177] neighbouring villages were unanimous in saying that such boats were not made by them until after the introduction of white men's tools, which are largely employed in their manufacture. The
- [412] Petats people, however, say that their fathers used to make *mon* with stone tools, and to use a sharply pointed shell for boring the necessary holes by means of which the planks are fixed together.
- 501 Friederici (1912, p. 292) derives the Buka *mon*, on the evidence of similarity of technical construction, from the *orem bai* of the
- 177 Moluccas. He gives a comparative list of terms for the different
- 174 portions of its complex structure which, he says, is sufficient to prove with absolute certainty that the *mon*, with its name, came from the east and north coasts of Buka by way of Nissan, Anir, and Tanga to South New Mecklenburg (the present New Ireland) (pp. 290 ff.).
- 396 *Material and tools.* C. M. Woodford, in his account of the canoes of the British Solomon Islands (1922, p. 508), pertinently remarks: 'It is difficult to understand how the natives were able, before they became acquainted with iron tools, to adze down the canoe planks to the requisite degree of thinness and shape them with the aid only of stone implements.' But he cites the evidence of the early

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travellers, beginning with Mendaña, showing that they undoubtedly did so, and, as mentioned in the previous paragraph, the Petats people were doing so not very long ago. It is interesting to note that the Kurtatchi people, who apparently learnt the method of manufacture after the introduction of white men's tools, said most emphatically that it would be impossible to make them without. Nowadays, the tools employed include axes, metal adzes, gimlets, augurs, sometimes a brace and bit, and occasionally a plane. In the absence of a brace and bit, pieces of wire or nails, which can be obtained from the Chinese stores, are heated and the requisite holes are burned with them. [412] [177] [437]

For the main planks of the *mon* a tree called *panots* (the same as that employed for rafts) is used. A large tree will provide five or six planks for a medium-sized *mon*. The tough outer skin of *Lygodium dichotomum* (*asam*) is used for binding them together, and the seams are caulked with *Parinarium laurinum* (*atsif*), the 'putty nut'. 396 824

Method of construction. The technique employed in the manufacture of *mon* in this area differs very considerably from that practised in the British Solomons as described by Ivens (1927, pp. 149 ff.) and Woodford (1922, pp. 508 ff.), as does also the appearance of the canoe when finished. I watched the procedure both at Petats and at Kurtatchi, but as I did not see the early stages at Petats, I take the description which follows from my Kurtatchi note-book, and shall use the Kurtatchi terms. The Petats terms are given by Friederici (1912, p. 290), who does not, however, give details of the construction. 396

The first business is to cut the planks. Those for the bottom of the *mon* are about 6 inches wide in the middle, and are tapered off to points at each end. They are planed with an adze (*turaxar*) to a thickness of $\frac{1}{2}$ to $\frac{3}{4}$ inch. The outside of each plank is charred by being held over a fire of chips (Pl. 50a). It is then rubbed smooth in the sand, and 'set' by being dipped in the sea. This is said to make the planks seaworthy, 'the same as tar', as one man said. (The men who have worked on plantations have seen white men tarring their boats.)

There is no sharp keel. The plank (*watén*) which forms the middle of the bottom of the *mon* is laid on the ground, and a plank (*pal*) is placed on either side of it. The adjacent edges of both, which have been bevelled slightly, are then pierced by a row of

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[284]

holes, made with a hot wire, or a gimlet, if one is available. The holes are placed at intervals of about 3 inches unless the wood is defective, when they will be closer together. Care is taken to

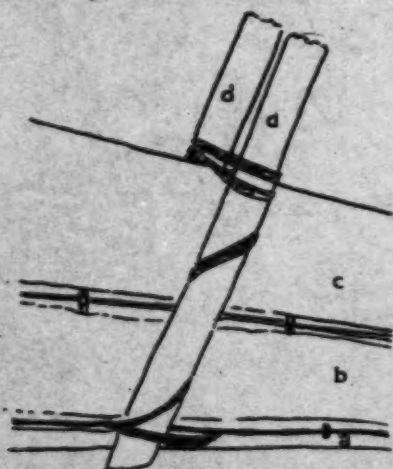


FIG. 19. Planks of bottom of *mon* before opening out. (a) *wañén*; (b) *pál*; (c) *bétapa*; (d) supporting sticks.

make them opposite to each other, on each side of the central plank, and exactly paired with those on the side planks. The three planks, still lying flat side by side, are then fixed together by a series of fastenings of *asam*, split till it is in strips of a breadth of about $\frac{1}{4}$ inch. This is threaded through the corresponding holes in the two planks to be joined. It is first put through the centre plank from the inside outwards, back through the hole in the outer plank, carried right round and threaded through again, so that there are two thicknesses of *asam* in the tie. A twist is

then put twice round the middle of the tie, between the two planks, one end is tucked in, and the other put through the band thus formed, from below upwards, and cut off short on the inside. During this process frequent injunctions are heard, '*Kits a pots ia!*' 'Fasten it very firmly!'

When the two planks have been thus fastened, one on each side of the centre one, the side planks are bent up so that they stand upright at right angles to the middle one. Another plank (*bétapa*) is then put on at each side, carrying on the upright line, and likewise fixed with *asam*. For a large *mon*, a third pair of planks (*wañén*) would be added. Pieces of wood are then tied in couples, one each side of the now upright planks, and lashed securely together at top and bottom (Fig. 19). One pair is fixed on each side of the canoe towards one end, and a similar pair on each side at the other end. The canoe now consists of a bottom plank, lying flat, and on each side of it two planks fastened edge to edge, standing up at right angles. A *mon* intended to have two seats, i.e. a small one, measured 17 feet along the bottom plank, from point to point.

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396 ●

The whole thing is then turned upside down, and a long, curved stick, made of the root of a tree called *tsito*, is fastened on at each end, down the join, as far as the tip of the middle plank (*watën*) by lashings of *asam* passed through holes in the stick and the planks on each side of it (Fig. 20). The other end of this end-keel (*lamut*)



FIG. 20. Fastening of *lamut*. (a) *lamut*; (b) *päl*; (c) *bditawa*.

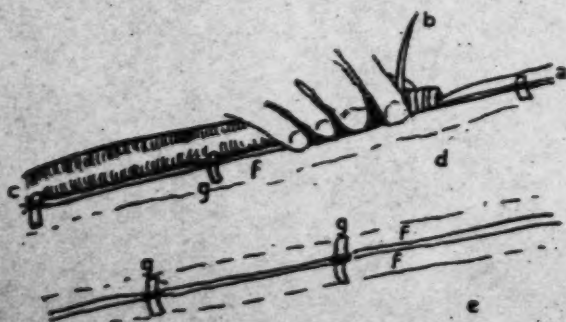


FIG. 21. Method of fastening end of *lamut*. (a) *watën*; (b) fastening; (c) *lamut*; (d) *päl*; (e) *bditawa*; (f) bevelled edge of planks; (g) ties of *asam* fixing planks together.

projects for several feet, curling down over the canoe. The point of junction with the tip of the *watën* is bound round with several turns of *asam*, great care being taken to make it secure (Fig. 21). The *lamut* is used on both ends of the canoe, which are identical on the outside. Inside, the difference is that the stern is furnished with a single seat for the steersman, while the bow usually has a small space without seats, used for cargo.

In this condition the canoe is usually left for a day or two. Up 396
to now the work may have been done on the beach, but it is neces- 417
sary after this to work in the shade, so it is brought into a shed;

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396 and put on a stand consisting of logs (*papan*) resting on forked
 [417] sticks (*atōn*) at a height convenient for working. It is now turned
 over again, so that the end of the *lamut* curves upwards. Some
 [824] strong creeper (*maswal*) is tied round the bottom plank, threaded
 through between the two adjacent planks, and fastened round the
papan, so as to fix the canoe securely to the stand. Lengths of
 creeper are also passed through between the side planks. These
 side planks are now pressed outwards by pushing between them
 [401] a couple of stout sticks about 2 feet long, pushing against one side
 while resting the other end of the sticks against the other side.
 Suddenly the whole thing opens with a cracking noise. The outer
 planks are then pulled down and tied firmly to the supporting logs
 by means of the strings threaded between them. This pulls them
 still farther apart, till all five lie almost in a flat plane. Some con-
 siderable pressure is needed to pull down the second side after
 the first side is secured. Both ends of what are now the outer planks
 are then tied firmly round their tips, binding them together and
 to the end-keel.

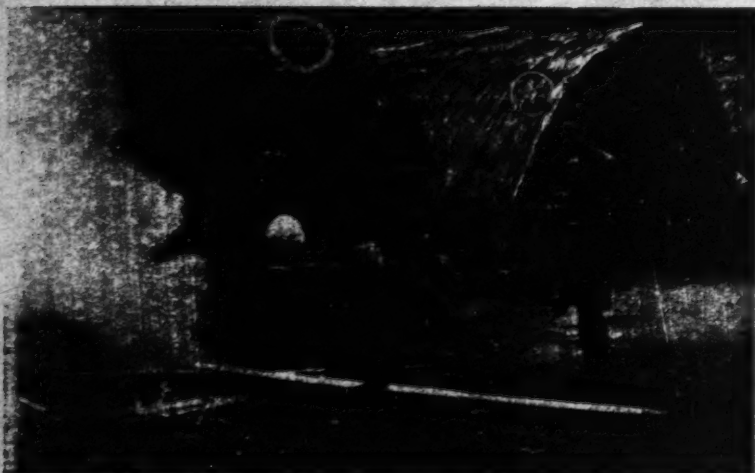
386 Women or boys are now pressed into service for grinding up
 the 'putty nut'. This is done on lumps of brain coral. When
 396 freshly ground it is of a pinkish-yellow colour, but rapidly turns
 824 red. In a few days it has become dark red, and in a few weeks
 quite black, and very hard. It must be used when freshly picked
 and freshly grated, and must be put on rapidly in the shade, as
 it begins to harden very quickly. It is thickly plastered over all
 the seams, on both sides, by means of the worker's fingers (Pl.
 51 a, b). There is then an interval of several days to allow the seams
 to harden.

396 When work is resumed, the supporting sticks are removed, and
 the holes which were left because of their presence when the seams
 were 'puttied' are filled in. In cutting the third pair of planks
 (*bátawa*) a ledge (*bébékil*) is left running inwards for about a foot
 from each end. Holes are made in these ledges opposite one
 another, the distances between them, about 2½ inches, being care-
 fully measured with a piece of fibre. Short, stout braces (also called
bébékil) are wedged in between the planks, and tied into place
 through these holes. After being placed in position, the *bébékil* are
 served with *ataw* over their whole length. Six is the usual number
 for a small or medium-sized *mon*. Their object is to strengthen
 the canoe at its slender, pointed ends.

1: Blackwood E-5 (1929-1930) 1935

ON6 Buka ON6
Kurtatchi

PLATE 50



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a. CHARRING PLANKS FOR MON



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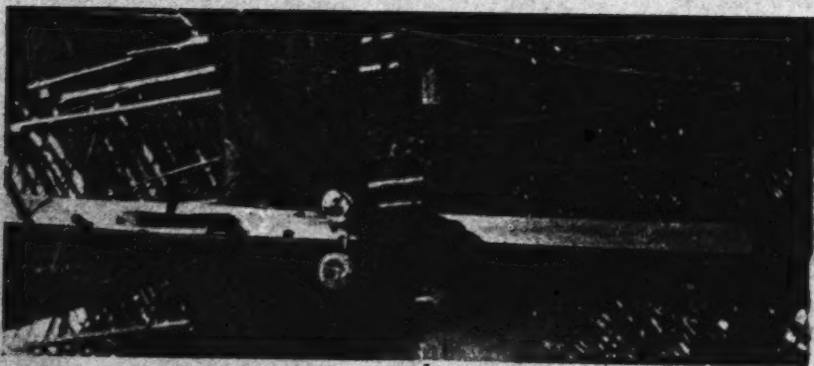
b. PARTLY BUILT MON

[facing p. 374]

1: Blackwood E-5 (1929-1930) 1935

ON6 Buka ON6
Kurtatchi

PLATE 51



MAKING A MON. a. FASTENING THE LAMUT.
b. CAULKING INSIDE AFTER OPENING OUT

[Facing p. 375]

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The two large planks (*waris*) which are to form the sides of the canoe are then trimmed, also with ledges at either end. Ledges are also left in the appropriate positions for fixing the seats. These ledges are called *lutē*. They are not disconnected cleats, but ridges all of one piece with the plank. The *waris* are about 12 inches wide in the middle. Several men hold one of the *waris* against the side of the canoe while others mark, with a piece of charred wood, the places where the ledges are to be left, at a certain distance from the end of the canoe. Sometimes each *waris* is measured against the canoe, sometimes only one is thus held, the other being laid on top of it on the ground and marked to correspond. [396]

The top edge of the *bátama* and the bottom edge of the *waris* are bevelled thin with an adze, or with a knife held like a plane. This is done after the outside has been charred, so that there is a white line running along the length of the canoe at the place where the two planks are joined. The holes for the *asam* ties are made about half an inch from the edge, at intervals of about 3 inches, the length of the worker's index finger, which he uses as a gauge. They were made, in the case of the canoes whose manufacture I watched, with a bit of pointed wire set into a wooden handle. Some of these implements consisted of large nails ground down to the appropriate thickness. Four people were engaged in boring the holes in the *bátama*, two on each side. The *waris* are then held in position, almost at right angles to the *bátama*, which, when released from the supporting sticks, curve only very slightly upwards from the flat plane in which all five of the original planks had been fixed. Holes are made in the *waris* corresponding in position to those in the *bátama*. The *waris* are fixed on both sides of the canoe simultaneously, several men holding them in place, one on each side making the holes, and another tying each pair of holes with *asam* as soon as they are ready. The method of fastening is the same as that used for the other planks which I have previously described. Another row of *bibēhil* is fixed at each end of the canoe, just above the first row. The ends of the canoe are bound round with *asam*, which is twisted round several times and fixed in a notch cut in the end of the *waris*, threaded through a hole in the end-keel (*lamat*), and pulled tight. This binding is subsequently covered up with a liberal application of 'putty'. [804] [412] [284]

When all the ties joining the *bátama* to the *waris* have been

● 396 put in, the seams are caulked with putty and the canoe is left for several days to allow this to harden. A stick carefully cut to a size that can just be wedged in is put across the inside to prevent warping. This stick is called *tōhon*; it stays in its place until the putty is thoroughly dry (Pl. 50 b).

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531 The next procedure is to cut and trim the four wash-boards (*watsnan*). They are carefully measured against the *mon*, and the sides of the *warin* are cut away to fit them, special attention being given to the fit at the points. The *watsnan* are then charred by holding them over the fire, as the other planks had been. A man skilled in cutting the design is then commissioned to decorate them. He first makes an outline by scratching on the blackened side with the point of a knife, then he cuts away the background of the design, exposing the white wood beneath the charred surface, which leaves the black portion uncut standing out clearly (Pl. 52). I have also seen the design burnt on with a pointed stick glowing at the end. Some of the designs are given in Fig. 26 (p. 435). They are sometimes very elaborate, though not so much nowadays as formerly. That at the bow is often more elaborate than that at the stern.

Above the *watsnan* is fixed a short plank (*tariom*), with a slightly upturned end, fitted to the curve of the *lamut*. It is cut square at the other end, and does not reach to the end of the pattern on the *watsnan*. The prow and the stern are finished off with a pointed board (*bibian*) fastened to and running up the length of the *lamut*, but cut away from the top of it at an acute angle, to terminate in a sharp point slightly longer than the end of the *lamut* (Fig. 22). This is made of the wood of the *tšiniv*, the tree used for dug-out canoes. The *tariom* and the *bibian* are painted white by being rubbed over with the seaweed, *mō*. Two coats are put on in the shed, and a third after the *mon* has been for its first trip. *Tariom* and *bibian* are, as a rule, without design, but the *tariom* at the bow may, in a large canoe, carry a simple decoration.

396 It is said that the people of Lontis first made *mon* without any *bibian*, leaving the *lamut* bare, but a man of the Hahon people said this was not a good way, they should put the *bibian* on to strengthen it. It seems curious that a Hahon man, from the mountain district inland, should be credited with the introduction of this modification, but the same thing was told to me first at Kurtatchi, and again several months later at Tabut, so it would appear to be traditional.

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The rib-frames (*mepō*) on which the seats will rest are fashioned

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out of a solid piece of wood, in one piece. The pattern is always the same, varying only in size (Fig. 23). The seats themselves (poos) consist of planks merely laid on the top of the *mapō* without

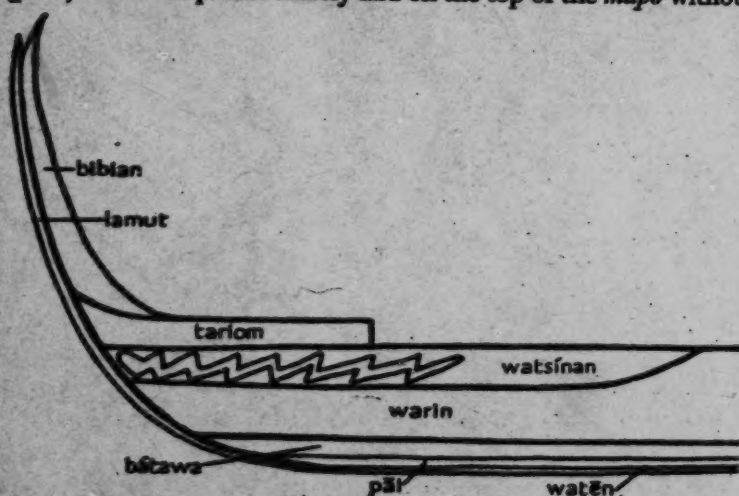


FIG. 22. Names of parts of a mon.

FIG. 23. *Mapō*, rib-frame of mon.

being fastened, which has the disadvantage that they are continually slipping, and having to be readjusted *en route*, to the great discomfort of the paddlers. At Tabut, while I was there, one man decided, on his own initiative, that it would be an improvement to make the seat in one piece with the *mapō*, and this was done on one canoe as an experiment.

On gala occasions both ends of the *mon* are decorated with streamers of grass, coloured a reddish-purple with a dye made from the roots of *Merinde citrifolia* rubbed on a piece of coral and mixed with lime, and then boiled with the grass it is desired to dye. These streamers (*kimar*) are fixed to the *lamut*.

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396 TERMS USED IN CONNEKION WITH MAKING OF PLANK CANOE

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	Meaning of Term	Kurtatchi dialect
Canoe		<i>mon</i>
Bow of <i>mon</i>		<i>matom</i>
Stern of <i>mon</i>		<i>kapits</i>
Planks, collectively (lit. 'wood (of) <i>mon</i> ')		<i>no'ou mon</i>
Middle plank of bottom		<i>watén</i>
First plank on either side of it		<i>pál</i>
Second " " " "		<i>bditawa</i>
Third " " " " (in a large canoe)		<i>wagin</i>
All these lie nearly flat and are submerged when the canoe is in the water.		
Side plank, above the water		<i>warin</i>
Charred outside of <i>warin</i>		<i>vau</i>
Plank let in at end of <i>warin</i> , carrying ornamental pattern cut or burnt on it		<i>waitsnan</i>
Plank above <i>waitsnan</i> , painted white, occasionally with pattern		<i>tdriom</i>
End-keel curving up from bottom at both ends		<i>lámut</i>
Pointed boards fixed along end-keel		<i>bibian</i>
Bevelled edges of planks in which holes are bored for attaching next plank		<i>pits</i>
Ledges with holes for fixing cross-pieces at bow and stern		<i>bébékil</i>
Cross-pieces, served with <i>asam</i>		<i>bébékil</i> or <i>kowara</i>
Ledges for fixing rib-frames		<i>kutí</i> or <i>hortéu</i>
Rib-frames, carved in traditional pattern		<i>mapé</i>
Holes forming integral part of pattern (lit. 'eye (of) <i>kutí</i> ')		<i>matan kutí</i> or <i>matan hortéu</i>
Planks laid (without fastening) upon these to serve as seats		<i>poan</i>
To caulk the seams with 'putty nut'		<i>asin ta atifit</i>
Platform on which <i>mon</i> is fixed during construction		<i>papan</i>
Forked sticks on which platform is raised to height convenient for working		<i>atón</i>
Tree of which planks are made		<i>pámetis</i>
Coloured grass used on end-keel for decoration		<i>kinar</i>
Shed in which <i>mon</i> is kept when finished		<i>hek</i>

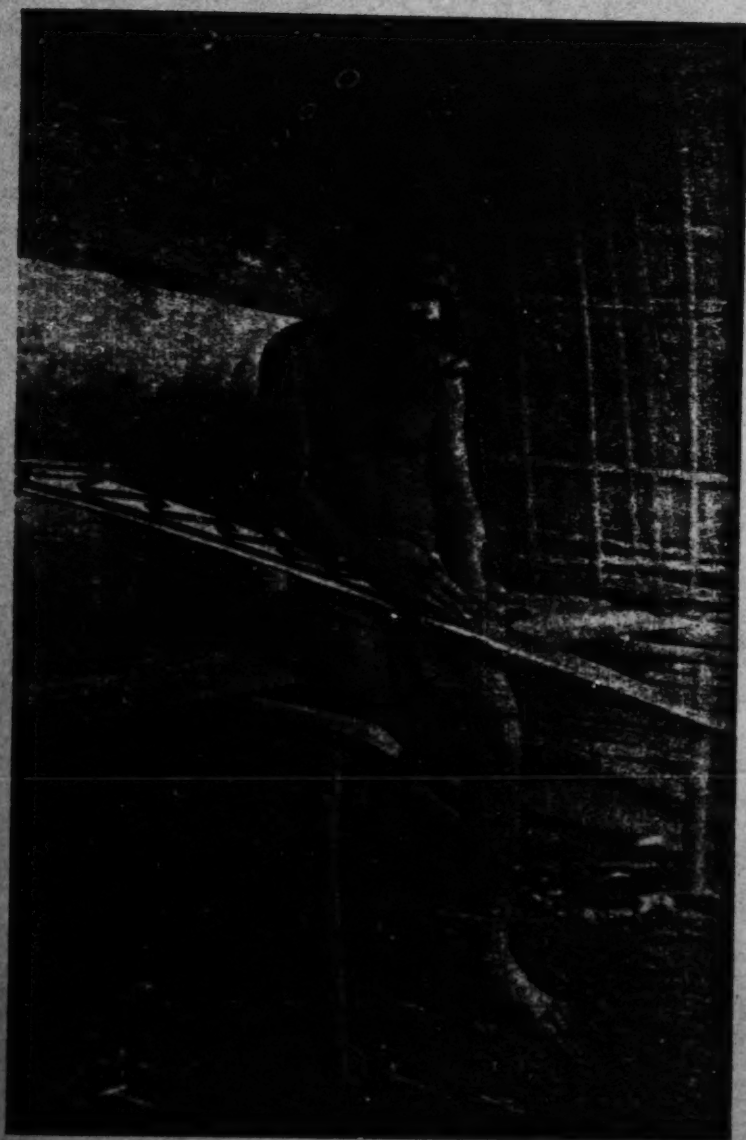
501 Size. The size of a *mon* is reckoned according to the number of its *poan*, i.e. seats, each accommodating two persons, except that at the stern, which is for the steersman only. The largest were those used in warfare, and now that the days of fighting are over, they have no function and have ceased to be made. These war-canoes frequently held thirty or forty men, but at the present time a *mon* with ten *poan*, holding eighteen paddlers and a steersman, is considered a large one. Most of those I saw in process of construction were for use in bonito fishing, for which three *poan* is considered the appropriate size. But each group of adjacent villages likes to have one with eight or ten *poan* at the disposal of

1: Blackwood E-5 (1929-1930) 1935

ON6 Buka ON6

Kurtatchi

PLATE 52



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CARVING WATSINAN

[Facing p. 378]

smaller, basketlike, square container is attached above this platform. Both are used for storing all sorts of things: fish, implements, baskets of food, etc. The ornamentation of these boats is not very [53] careful; some have, on the prow as well as the stern, individual geometrical figures painted black and red, others a similarly painted figure of a bird, and still others the grotesque human figure executed in bas relief, which we find so often in the northwestern Solomon Islands and which is characteristic for this region. By far the greatest number of dugouts have no ornamentation at all. They are to be found in Nissan, on the Carteret Islands, in Buka and on the coast of Bougainville--especially in the north and in the east--as well as on the islands of the Bougainville Strait. Recently they have begun making sails of cotton material; yet older islanders assured me repeatedly that this was an innovation that was not known in their youth. In a few places, for example Carola Harbor and the Shortland Islands, I was able to date the first appearance of sails. In the former place sails of cotton material were first introduced in 1890; in the Shortland Islands no one had sails in the year 1885, but in the year 1888 they were quite common. In their cut these sails imitate a European spar boat sail [Spriet-Bootsegel] From this it can probably be concluded that the use of sails is an innovation of most recent times and a simple imitation of European sails.

By far the greatest care is expended on the construction of the large boats built of boards. Guppy gives an exhaustive description of the ones from the southeastern Solomon Islands and the Shortland Islands. The big boats in Nissan, Buka, and northern Bougainville differ slightly in form from those in the Shortland Islands, although the arrangement of the boards is exactly the same as Guppy describes. The individual boards are first split with an ax from the felled trunk and planed as carefully as possible; in order [33] to make the not very hard wood more resistant, they char the sides slightly. First two long boards are attached together and form the bottom of the boat so that the joint follows the keel line. The side boards are likewise attached to these keel planks; three or four rows, and more rarely five, suffice to build up the sides. The prow and stern are constructed high and pointed from two planks which meet at a very acute angle. In the Shortland Islands as a rule they are much longer and almost vertical, and in the north more curved, but everywhere ornamented. [53]

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The ornamentation in Buka is a double one: it consists either of a row of the grotesque heads and human figures that are characteristic for this region in varying arrangements, or it is a row of reversed vees. All ornaments are executed in bas relief and painted black, red and white. In the Shortland Islands the very high prow is frequently decorated with a carved human figure; according to the statements of natives this is a personification of the tutelary deity who grants auspicious sea voyages and wards off evil spirits. In Buka the prow and stern are ornamented with an approximately 40 centimeter wide fringe, which extends from the tip of the prow to the waterline. This fringe (kehakehala) consists of red-dyed dried leaf strips of a species of palm. [171]

The joints are tightened by smearing them with the pulverized nut of parinarium laurinum. In order to give the light shell greater resistance and durability, wooden frames are set into the boat, which press firmly against the sides and are fastened to these at the edge. These frames (in Buka called mapou) are cut from a single piece and, corresponding to the inside shape of the boat, are almost semicircular. The two upper ends of the semicircle are connected by a straight piece of wood. From the middle of this two or three props lead to the semicircle, which is thereby given greater rigidity. Also the thwarts for the rowers serve this purpose; they are notched underneath in such a way that the notches project beyond the edges of the boat on both sides and prevent them from bending in or out. These boats vary greatly in size; there are many that comfortably carry 40 adults and in addition a considerable cargo. In the middle of the large chieftains' boats a small platform is built on which the owner stands, with bow and arrow in hand. [824] 396

The rowers sit together in pairs on the thwarts and propel the boat with light oars that are different in the north and the south. In the Shortland Islands the oar (faae) has a wider and shorter blade than in Buka; at the upper end the handle is provided with a small crook that projects at a right angle and gives the hand a comfortable means of grasping it powerfully. These oars are very well planed, but otherwise unornamented. In Buka the oar (hoae) is equipped with a long, pointed, lancet-shaped blade and this is frequently decorated in bas relief--usually with the characteristic grotesque head or human figure, sometimes with a bird or fish, and sometimes also with round figures or zigzag lines; here the handle is never provided with a crook. I would like to mention that this characteristic Buka oar is still rather common nowadays, but it is cited completely erroneously in handbooks [502] 171 501 171